EXAMINING YOU

Medical technology and your health

Understanding how our bodies work can help us stay healthy, determine when something is wrong, and get better when something does go wrong. Using a range of technologies, inspiration from medical experts, and a good-sense lifestyle, visitors can improve and maintain their overall well-being – from head to toe. This is the place where visitors will use various technologies to help them see how their own bodies function under different conditions. This is also where visitors encounter a few tricky games that reveal the brain’s role in how we perceive the world.

Anatomage Table (Sponsored by The Bone & Joint Center) - The Anatomage shows human and animal anatomy in technologically advanced 3D visualization. Using a fully-segmented real human 3D anatomy system, users can examine anatomy and tissue samples as they would on a fresh cadaver. The table allows for exploration and learning of human and animal anatomy beyond what any cadaver could offer.

Blood Super Highway (Sponsored by Metro-Area Ambulance Service) - Visitors see how blood moves through our veins and arteries after leaving the chambers of the heart. Fluid pulses through 2” to 3” diameter plastic tubing suspended over the heart-related components, providing a large-scale, dynamic, unifying design element to the gallery. In addition to the overhead blood vessels, a graphic panel provides a number of surprising facts about blood and the circulatory system.

Your Circulating Blood - (Sponsored by Metro-Area Ambulance Service) - Using a hand pump, visitors move blood through a simple closed model of the circulatory system. As they use the pump, visitors feel how hard it is to do the work a heart does.

Vein Viewer – Visitors place their forearms under a beam of near-infrared light to see the network of veins under their skin. Then they can do a self-test on the veins to see which direction the blood is flowing.

Thrown Off-Center (Sponsored by Metro-Area Ambulance Service) – Visitors toss bean bags into a bin while looking through special prism glasses that adversely affect their vision. When they take off the glasses and try again, their brains will need to relearn the task.

Scope on a Rope – Visitors can look at their skin, hair, and clothing using a high-powered magnifier connected to a monitor. Supporting graphics show the layers of our skin.
Brain Matters Sample Table - Our brains are the neural command centers for all bodily systems, but we seldom get the opportunity to see one up close. A magnifier and supporting graphics help visitors find answers to questions about their own brains. A take-apart 3D model lets visitors remove the two halves of the brain from a mannequin’s head. Supporting graphics help visitors connect the left and right brain to the sides of the body that each controls.

Laparoscopy (Sponsored by Sanford Health) – At this simulated surgery activity, visitors perform a delicate task using laparoscopic surgical instruments. A monitor nearby features a surgeon describing how she uses robotic technologies that make very delicate surgeries possible, even from a distance.

Hear Me Two Ways - Visitors listen to low frequency sounds via bone conduction. They can also use a magnifier to examine a replica ear bone specimen, comparing it to a model ear or detailed graphic.

Test Your Reaction - Fast reactions can be done in the blink of an eye. Visitors test their own fast reactions as they catch a suddenly falling stick and see their reaction time.

Iris of the Eye - Visitors hold their faces very close to a half-silvered mirror, and turn a knob to dim a light source behind the mirror. As the light is adjusted, visitors can observe as their pupil becomes larger and smaller as the iris dilates and contracts in relation to the intensity of the light.

Eye Model - Visitors try to keep an eye model focused on an illuminated shape. They find out that they have to refocus the lens when they change the distance between eye and lens in order to keep the – inverted – image on the retina clearly visible.

Dental Experience - (Sponsored by ND Dental Foundation) – A large-scale mouth offers visitors the opportunity to brush and floss teeth, add fillings, and examine the anatomy of a tooth.